



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference VOICEMAIL Mgmt	FOR FURTHER ACTION		See Form PCT/PEA416
International application No. PCT/GB2004/001736	International filing date (<i>day/month/year</i>) 22.04.2004	Priority date (<i>day/month/year</i>) 22.04.2003	
International Patent Classification (IPC) or national classification and IPC H04M1/725, H04M3/53			
Applicant SPINVOX LIMITED et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> <i>sent to the applicant and to the International Bureau</i> a total of 6 sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input checked="" type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 22.02.2005		Date of completion of this report 12.07.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer Pascual Vallés, E Telephone No. +31 70 340-1022 	

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/001736

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1, 2, 6-36	as originally filed
3-5	received on 28.04.2005 with letter of 22.04.2005

Claims, Numbers

1-16	received on 28.04.2005 with letter of 22.04.2005
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Drawings, Sheets

1/13-13/13	as originally filed
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- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3, 8, 12-15
	No: Claims	1,2, 4-7, 9-11, 16
Inventive step (IS)	Yes: Claims	
	No: Claims	1-16
Industrial applicability (IA)	Yes: Claims	1-16
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VI Certain documents cited

1. Certain published documents (Rule 70.10)

and /or

2. Non-written disclosures (Rule 70.9)

see separate sheet

The following documents are referred to in this communication:

- D1: US-B-6 333 9731 (BEATON BRIAN FINLAY ET AL) 25 December 2001 (2001-12-25)
D2: US-A-5 751 793 (DAVY GLORIA E ET AL) 12 May 1998 (1998-05-12)
D3: EP-A-1 109 390 (AT & T CORP) 20 June 2001 (2001-06-20)

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parenthesis applying to this document):

A method of managing voice messages using a mobile telephone (fig.1 and 2, ref.1100, col.1, lines 48-59), comprising the steps of:

(a) a graphical user interface (fig.4, ref.4100, col.5, line 63-col.6, line 14) being opened on the mobile telephone, the graphical user interface individually listing remotely stored voice messages in a menu list (fig.7A, col.8, lines 36-65), the voice messages being meant for a user of the mobile telephone;

(b) enabling the user to select a voice message from the list to initiate playback on the telephone (fig.10, col.9, line 36-col.10, line 2).

wherein the GUI also enables the user to configure call greetings (col.9, lines 45-50).

The subject-matter of independent method claim 1 is not new (Article 33(2) PCT).

- 1.1 The same reasoning applies, to the subject-matter of the corresponding independent apparatus claim 16 which therefore is also considered not new.
2. Dependent claims 2-15 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), see documents D1-D3 and the corresponding passages cited in the search report.

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

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3. The subject-matter of claims 1-16 relates to a method of managing voice messages using a mobile telephone and has an industrial application.

Re Item VI

Certain published documents

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
EP 1 372 321	17/12/2003	09/06/2003	10/06/2002

SUMMARY OF THE INVENTION

In a first aspect, there is a method of managing voice messages using a mobile telephone, comprising the steps of:

- 5 (a) a graphical user interface (GUI) being opened on the mobile telephone, the GUI individually listing remotely stored voice messages in a menu list, the voice messages being meant for a user of the mobile telephone;
- (b) enabling the user to select a voice message from the list to initiate playback on the mobile telephone;
- 10 wherein the GUI also enables the user to configure call greetings.

The present invention hence supplants the current approach of retrieving voice messages (based on the user listening to various options spoken by a synthetic voice, such as "press 1 to reply", "press 2 to delete", "press 3 to repeat") with a GUI based system; this

15 system individually lists voice messages in a menu list displayed on the mobile telephone, making it very simple for an end-user to select a message to initiate playback of the voice message. Furthermore, the critical voicemail management function of configuring call greetings (e.g. listening to the current greeting, recording a new greeting and turning greetings on and off) is now an integral part of the GUI. Conventionally, configuring

20 call greetings is not possible within the GUI that actually lists remotely stored messages; instead the user has to, for example, make a call to the voice mail server and interact with its IVR system. It is far more convenient to the user if call greeting configuration can instead be done from with the same GUI that lists voice messages.

25 Preferably, the GUI also enables the user to configure call diversion behaviour. Call diversion behaviour is conventionally handled by an entirely separate function that is not integrated with the GUI that lists remotely stored voice messages.

The menu list of remotely stored voice messages can also be generated after the mobile

30 telephone connects to a voicemail server on which the voice messages are remotely stored: i.e. the GUI does not simply show a view of locally stored voice messages but is instead a view directly into the remote voice server itself. This avoids the need for

messages to be sent from the mail server to the mobile telephone whenever a new voice message is received and associated synchronisation or data replication activities.

In an implementation, the GUI is a hierarchical interface which at a first or second level lists the number of stored voice messages in an in-box. The interface may list at a first or second level whether the received voice messages are new or have been listened to. The interface could be an inbox view with folders for storage/retrieval of voice messages.

10 In addition, the GUI can list the name of a person leaving a voice message or their telephone number. This greatly aids operation: the end user can quickly scan the menu list of stored voice messages, looking at the caller name etc. to decide if there are any important messages to listen to immediately.

15 The GUI may display a menu list with one or more of the following selectable options: play all voice messages; delete all voice messages; mark all voice messages as heard; forward all voice messages; store all voice messages. Again, this GUI-based approach is far easier for most people to operate than the prior art "press 1 to reply", "press 2 to delete", "press 3 to repeat" etc. approach.

20 The GUI may also be a hierarchical interface which displays a menu list of selectable items that enable the user to initiate further actions in respect of a selected voice message. For example, the further actions could be selected from the list: erase voice message; next voice message; fast forward through voice message; rewind through voice message; play previous voice message; call back to sender of voice message; open up text messaging application; store voice message in a specific folder; forward voice message; add caller's telephone number to contacts. The configure greetings and configure call diversion behaviour controls may also be part of this hierarchical interface. Again, presenting these options graphically on a display of the mobile telephone is far better than the current approach which give no visual cues as to how to initiate these functions.

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Adding a caller's telephone number to a contacts application is an example of parsing the transcribed text message and using the parsed data in an application running on the

mobile telephone. The GUI can display a menu list of other selectable items that enable the user to initiate further kinds of parsing and use of the parsed data. For example:

- (a) extracting the phone number spoken allowing it to be used (to make a call), saved, edited or added to a phone book;
- 5 (b) extracting an email address and allowing it to be used, saved, edited or added to an address book;
- (c) extracting a physical address and allowing it to be used, saved, edited or added to an address book;
- (d) extracting a web address (hyperlink) and allow it to be used, edited, saved or
10 added to an address book or browser favourites.
- (e) extracting a time for a meeting and allow it to be used, saved, edited and added to an agenda as an entry
- (f) extracting a number and saving it to one of the device applications
- (g) extracting a real noun and providing options to search for it or, look it up on the
15 web (WAP or full browser).

One or more items from the list could be displayed whilst the voice message is being played back on the device. Speaking a command to initiate the further actions is also possible; then the telephone may display synchronised aural prompts (IVR) to facilitate a
20 user speaking the command they want executed.

In another implementation, voice messages are succinctly transcribed to text format by remote, human transcribers and the transcribed messages are then sent to the mobile telephone. The GUI then lists any voice messages that have been converted to text
25 format and the GUI further enables those voice messages converted to text format to be selected to cause the text format message to be displayed.

In a second aspect, there is a mobile telephone programmed to perform the above methods.

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Voicemail Mgmt

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CLAIMS

1. A method of managing voice messages using a mobile telephone, comprising the steps of:
 - 5 (a) a graphical user interface (GUI) being opened on the mobile telephone, the GUI individually listing remotely stored voice messages in a menu list, the voice messages being meant for a user of the mobile telephone;
 - (b) enabling the user to select a voice message from the list to initiate playback on the telephone;
- 10 wherein the GUI also enables the user to configure call greetings.
2. The method of Claim 1 wherein the GUI also enables the user to configure call diversion behaviour.
- 15 3. The method of Claim 1 wherein the menu list of remotely stored voice messages is generated after the mobile telephone connects to a voicemail server on which the voice messages are remotely stored.
4. The method of Claim 1 in which the GUI is a hierarchical interface which, at a
20 first or second level, lists the number of stored voice messages in an in-box.
5. The method of Claim 4 in which the interface lists at a first or second level whether the received voice messages are new or have been listened to.
- 25 6. The method of Claim 4 in which the interface is an inbox view with folders for storage/retrieval of voice messages.
7. The method of any preceding Claim in which the GUI lists the name of a person leaving a voice message or their telephone number.
- 30 8. The method of any preceding Claim in which the GUI displays a menu list with one or more of the following selectable options: play all voice messages; delete all voice

messages; mark all voice messages as heard; forward all voice messages; store all voice messages.

5 9. The method of any preceding Claim in which the GUI is a hierarchical interface which displays a menu list of selectable items that enable the user to initiate further actions in respect of a selected voice message.

10 10. The method of Claim 9 in which the further actions are selected from the list: erase voice message; next voice message; fast forward through voice message; rewind through voice message; play previous voice message; store a message; call back to sender of voice message; open up text messaging application; forward voice message; add caller's telephone number to contacts.

15 11. The method of Claim 10 in which one or more items from the list are displayed whilst the voice message is being played back on the device.

20 12. The method of any preceding Claim in which the telephone displays synchronised aural prompts (IVR) to facilitate a user speaking the command they want executed.

25 13. The method of any preceding Claim in which the GUI lists any voice messages that have been converted to text format and the GUI further enables those voice messages converted to text format to be selected to cause the text format message to be displayed.

14. The method of Claim 13 in which the GUI can display a menu list of other selectable items that enable the user to initiate parsing the converted text message and using the parsed data in an application running on the wireless information device.

30 15. The method of Claim 14 in which parsing and using the parsed data involves one or more of the following:

(a) extracting the phone number spoken allowing it to be used (to make a call), saved, edited or added to a phone book;

- (b) extracting an email address and allowing it to be used, saved, edited or added to an address book;
- (c) extracting a physical address and allowing it to be used, saved, edited or added to an address book;
- 5 (d) extracting a web address (hyperlink) and allow it to be used, edited, saved or added to an address book or browser favourites.
- (e) extracting a time for a meeting and allow it to be used, saved, edited and added to an agenda as an entry
- (f) extracting a number and saving it to one of the device applications
- 10 (g) extracting a real noun and providing options to search for it or, look it up on the web (WAP or full browser).

16. A mobile telephone programmed to perform the method of any preceding Claim 1- 15.